

62. (New) The implant of Claim 61, wherein said biocompatible support comprises a calcium-based material.

63. (New) The implant of Claim 62, wherein said biocompatible support comprises coral.

64. (New) The implant of Claim 63, wherein said biocompatible support comprises high-porosity coral.

65.(New) The implant of Claim 61, further comprising a constituent inducing and/or promoting the gelling of the cells.

66. (New) The implant of Claim 61, further comprising at least one angiogenic factor.

67. (New) The implant of Claim 61, wherein said eukaryotic cells are involved in connective tissue development

68. (New) The implant of Claim 61, wherein said implant produces an *in vivo* therapeutic effect.

69. (New) The implant of Claim 68, wherein the therapeutic effect is the development of vascularized connective tissue.

70.(New) The implant of Claim 69, wherein said connective tissue comprises mesenchymal cells.

71. (New) The implant of Claim 61, wherein said eukaryotic cells are genetically modified.

72. (New) A method for administering cells to a mammalian host comprising:

- a) providing eukaryotic cells which are tolerated immunologically by said mammalian host;
- b) anchoring said cells of step a) onto the surface of and/or into a biocompatible support to obtain an implant; and

c) introducing the implant of step b) into said mammalian host, thereby administering said eukaryotic cells to said mammalian host.

73. (New) The method of Claim 72, wherein said biocompatible support comprises a calcium-based material.

74. (New) The method of Claim 73, wherein said biocompatible support comprises coral.

75. (New) The method of Claim 74, wherein said biocompatible support comprises high-porosity coral.

76. (New) The method of Claim 72, wherein said eukaryotic cells in step (b) are simultaneously provided with a constituent for inducing and/or promoting the gelation of said cells.

77. (New) The method of Claim 72, further comprising adding in step b) at least one angiogenic factor.

78. (New) The method of Claim 72, wherein said cells are involved in vascularized connective tissue development.

79. (New) The method of Claim 72, wherein said eukaryotic cells are genetically modified cells.

80. (New) The method of Claim 72, wherein said eukaryotic cells produce a therapeutic effect when administered to an organism.

81. (New) The method of Claim 80, wherein said therapeutic effect is the development of connective tissue.

82. (New) The method of Claim 81, wherein said connective tissue comprises mesenchymal cells.

83. (New) A method for treating a mammalian host affected with a disease, comprising administering to a mammalian host an implant according to claim 1.

84. (New) The method of Claim 83, wherein said administration of said implant permits the development of connective tissue.

85. (New) A method for inducing the development of vascularized connective tissue in a mammal comprising administering an implant consisting of a biocompatible support appropriate for biological anchoring of eukaryotic cells to a mammalian host.

86. (New) The method according to Claim 85, wherein said connective tissue is formed at least partially of mesenchymal cells.

87. (New) The method of Claim 85, wherein said implant induces the formation of a neo-organ.

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Ans 88. (New) The method of Claim 85, wherein said biocompatible support is resorbed *in vivo*.

89. (New) The method of Claim 85, wherein said biocompatible support comprises a calcium-based material.

90. (New) The method of Claim 99, wherein said calcium-based material is coral.

91. (New) The method of Claim 85, wherein said biocompatible support comprises high-porosity coral.
